

Application No: 10/518,455
Amendment A
Reply to Office Action Dated 10/02/2007

Attorney Docket No: 3926.122

REMARKS

Claims 19-22 are now pending in the application. Claims 1-18 have been cancelled.
Claims 19-22 have been added.

Specification

The disclosure is objected to because of informalities. More specifically, the Examiner has stated that reference to claims in a specification is not acceptable because the substance of the claims usually change significantly during prosecution by amendment or cancellation.

Appropriate correction has been made.

Claim Rejections - 35 U.S.C. § 112

Claims 10-18 have been rejected under 35 USC 112, second paragraph, as being indefinite. More specifically, the Examiner has stated that the claims include numeral references to the drawings and thus render the claims indefinite because the drawings may not represent the same material or structure as what described in the claims.

Please note that claims 10-18 have been cancelled and new claims 19-22 have been added. The new claims do not include any numeral reference to the drawings.

Claim Rejections - 35 U.S.C. § 102/103

Claims 10-18 have been rejected under 35 USC 102(a) as being anticipated by McCrary (U.S. Patent 7,270,879).

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Claims 10-18 have been rejected under 35 USC 102(a) as being anticipated by Kondo (U.S. Patent 6,329,061).

Claims 15 and 17 have been rejected under 35 USC 102(a) as being anticipated by Bredt (U.S. Patent 5,902,441).

Claims 10-14, 16, and 18 have been rejected under 35 USC 103(a) as being unpatentable over Bredt.

The rejections have been considered and claims 10-18 have been cancelled and new claims 19-22 have been added to even more clearly define the present invention. More specifically, claim 19 now clearly recites that the granulated material consists of particles with a surface layer, the surface layer consists of a polyvinyl butyral (PVB) and has a nonpolar outer surface, and the binder liquid is selected from among liquids in which the surface layer of the particles of the granulated material is soluble.

McCrary discloses a particle comprising a particulate substrate and a thermoplastic elastomer present on or in the substrate. The thermoplastic polymer may contain certain percent of PVB (claim 15). However, in contrast to McCrary in which the thermoplastic polymer may contain certain percent of PVB, in the present invention, the surface layer consists of PVB. McCrary also does not disclose the application of PVB for 3D binder printing, the coating of a nonpolar outer surface, and a binder liquid in which the PVB is soluble.

Kondo discloses a laminated glass including a first and second transparent glass plates and an interlayer film interposed therebetween. The interlayer film has functional ultra-fine particles which are dispersed therein and the interlayer film may be made of PVB (see column 3, lines 57-60). However, it is noted that in contrast to Kondo in which the interlayer film may be made of PVB, in the present invention, it is the surface layer that consists of PVB. Kondo also

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does not disclose the application of PVB for 3D binder printing, the coating of a nonpolar outer surface, and a binder liquid in which the PVB is soluble.

Bredt discloses a 3D printing method. However, Bredt does not disclose PVB. Bredt also does not disclose the coating of a nonpolar outer surface, and a binder liquid in which the PVB is soluble.

A combination of the cited references would also not reach the present invention. It is also noted that since all of the cited references have very different classifications, it is not obvious for a person skilled in the art to even consider to combine them.

It is also noted that it is not obvious for a person skilled in the art to select PVB from hundreds or thousands of possible coating materials mentioned in Butvar.

It is, therefore, believed that none of the cited references, alone or in combination, disclose or suggest all the features as recited in claim 19.

Claim 19 is, therefore, believed to be patentable over cited prior art and since all the dependent claims are dependent on claim 19, they are believed to be patentable as well.

The Commissioner is hereby authorized to charge any fees which may be required at any time during the prosecution of this application without specific authorization, or credit any overpayment, to Deposit Account Number 50-0951.

Favorable consideration and early issuance of the Notice of Allowance are respectfully

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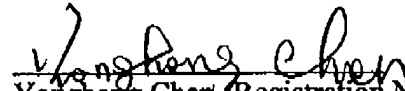
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requested. Should further issues remain prior to allowance, the Examiner is respectfully requested to contact the undersigned at the indicated telephone number.

Respectfully submitted,

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